

Applicants: Richard L. Bonkowski, et al  
Serial No.: 09/351,102  
Filing Date: July 8, 1999  
For: DIFFRACTIVE SURFACES WITH COLOR SHIFTING BACKGROUNDS

Att'y Docket No. 13676.142  
Group: 1772

INFORMATION DISCLOSURE CITATIONS MADE BY APPLICANTU.S. Patent Documents

Examiner Initial*	Patent Number	Issue Date	Name	Class	Sub Class	Filing Date
<u>AC</u> A1	4,434,010	02/28/84	Ash	106	291	10/26/81
<u>AC</u> A2	4,705,300	11/10/87	Berning, et al.	283	91	11/21/86
<u>AC</u> A3	4,705,356	11/10/87	Berning, et al.	350	166	07/13/84
<u>AC</u> A4	4,721,217	01/26/88	Phillips, et al.	215	230	08/07/86
<u>AC</u> A5	4,838,648	06/13/89	Phillips, et al.	350	166	05/03/88
<u>AC</u> A6	4,168,983	09/25/79	Vitands, et al.	106	14.12	04/13/78
<u>AC</u> A7	5,059,245	10/22/91	Phillips, et al.	106	22	09/26/88
<u>AC</u> A8	5,084,351	01/28/92	Phillips, et al.	428	411.1	03/29/89
<u>AC</u> A9	5,135,812	08/04/92	Phillips, et al.	428	403	03/27/91
<u>AC</u> A10	5,171,363	12/15/92	Phillips, et al.	106	22	06/21/91
<u>AC</u> A11	5,278,590	01/11/94	Phillips, et al.	359	589	04/26/89
<u>AC</u> A12	5,279,657	01/18/94	Phillips, et al.	106	22	06/23/92
<u>AC</u> A13	5,549,774	08/27/96	Miekka, et al.	156	209	05/11/92
<u>AC</u> A14	5,571,624	11/05/96	Phillips, et al.	428	403	12/15/94
<u>AC</u> A15	5,624,076	04/29/97	Miekka, et al.	241	3	06/07/95
<u>AC</u> A16	5,629,068	05/13/97	Miekka, et al.	428	148	06/07/95
<u>AC</u> A17	5,672,410	09/30/97	Miekka, et al.	428	148	02/09/93

Examiner:

Date Considered:

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicants: Richard L. Bonkowski, et al.  
Serial No.: 09/351,102  
Filing Date: July 8, 1999  
For: DIFFRACTIVE SURFACES WITH COLOR SHIFTING BACKGROUNDS

Att'y Docket No. 13676.142  
Group: 1772

### Other Documents

(including author (if listed), title, relevant pages, date of publication including at least month and year).

Examiner

Initial\*

Ac A18

The Mearl Corporation brochure for "Mearl Iridescent Film," Peekskill, New York.

Ac A19

J.A. Dobrowolski; K.M. Baird; P.D. Carman; and, A. Waldorf, "Optical Interference Coatings for Inhibiting of Counterfeiting," *Optica Acta*, 1973, Vol. 20, No. 12, 925-937.

Ac A20

The R.D. Mathis Company Manual for "Thin Film Evaporation Source Reference," Long Beach, California.

Ac A21

Minolta Manual for "Precise Color Communication, Color Control From Feeling to Instrumentation," Pages 18, 20, 22, 23, 46, 47, 48 and 49.

### **References Cited by Applicants**

While the filing of Information Disclosure Statements is voluntary, the procedure is governed by the guidelines of Section 609 of the Manual of Patent Examining Procedure and 37 C.F.R. §§ 1.97 and 1.98. To be considered a proper Information Disclosure Statement, Form PTO-1449 shall be accompanied by a copy of each listed patent or publication or other item of information and a translation of the pertinent portions of foreign documents (if an existing translation is readily available to the applicant), an explanation of relevance of each reference not in the English language, and should be submitted in a timely manner as set out in MPEP Sec. 609.

Examiners will consider all citations submitted in conformance with 37 C.F.R. § 1.98 and MPEP Sec. 609 and place their initials adjacent the citations in the spaces provided on this form. Examiners will also initial citation not in conformance with the guidelines which may have been considered. A reference may be considered by the Examiner for any reason whether or not the citation is in full conformance with the guidelines. A line will be drawn through a citation if it is not in conformance with the guidelines AND has not been considered. A copy of the submitted form, as reviewed by the Examiner, will be returned to the applicant with the next communication. The original of the form will be entered into the application file.

Each citation initialed by the Examiner will be printed on the issued patent in the same manner as reference cited by the Examiner on Form PTO-892.

The reference designations "A1," "A2," etc. (referring to Applicant's reference 1, Applicant's reference 2, etc.) will be used by the Examiner in the same manner as Examiner's reference designations "A," "B," "C," etc. on Office Action Form PTO-1142.

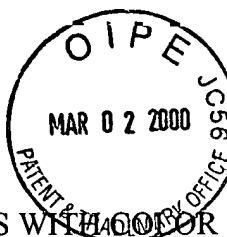
G:\DATA\WPDOCS2\JBS\13676142.149

Examiner:

Date Considered:

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant: Richard L. Bonkowski et al.  
 Serial No.: 09/351,102  
 Filing Date: July 8, 1999  
 For: DIFFRACTIVE SURFACES WITH OR WITHOUT SHIFTING BACKGROUNDS



Att'y Docket No.: 13676.142  
 Group: 1772

SUPPLEMENTAL INFORMATION DISCLOSURE CITATIONS MADE BY APPLICANT

U.S. Patent Documents

Examiner Initial*	Document Number	Issue Date	Name	Class	Sub-Class
<u>AE</u>	5,009,486	04/23/91	Dobrowolski et al.	350	16

TC 1700 MAIL ROOM  
 MAR - 3 2000  
 RECEIVED

**References Cited by Applicants**

While the filing of Information Disclosure Statements is voluntary, the procedure is governed by the guidelines of Section 609 of the Manual of Patent Examining Procedure and 37 C.F.R. §§ 1.97 and 1.98. To be considered a proper Information Disclosure Statement, Form PTO-1449 shall be accompanied by a copy of each listed patent or publication or other item of information and a translation of the pertinent portions of foreign documents (if an existing translation is readily available to the applicant), an explanation of relevance of each reference not in the English language, and should be submitted in a timely manner as set out in MPEP Sec. 609.

Examiners will consider all citations submitted in conformance with 37 C.F.R. § 1.98 and MPEP Sec. 609 and place their initials adjacent the citations in the spaces provided on this form. Examiners will also initial citations not in conformance with the guidelines which may have been considered. A reference may be considered by the Examiner for any reason whether or not the citation is in full conformance with the guidelines. A line will be drawn through a citation if it is not in conformance with the guidelines AND has not been considered. A copy of the submitted form, as reviewed by the Examiner, will be returned to the applicant with the next communication. The original of the form will be entered into the application file.

Each citation initialed by the Examiner will be printed on the issued patent in the same manner as references cited by the Examiner on Form PTO-892.

The reference designations "A1," "A2," etc. (referring to Applicant's reference 1, Applicant's reference 2, etc.) will be used by the Examiner in the same manner as Examiner's reference designations "A," "B," "C," etc. on Office Action Form PTO-1142.

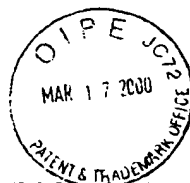
G:\DATA\WPDOCS\VF\W\GMT\136761421449.doc

Examiner:

Date Considered:

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609, draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicants: Richard L. Bonkowski, et al.  
 Serial No.: 09/351,102  
 Filing Date: July 8, 1999  
 For: DIFFRACTIVE SURFACES WITH COLOR SHIFTING BACKGROUNDS



Att'y Docket No. 13676.142  
 Group: 1772

SUPPLEMENTAL  
INFORMATION DISCLOSURE CITATIONS MADE BY APPLICANT

U.S. Patent Documents

Examiner Initial*	Patent Number	Issue Date	Name	Class	Sub Class	Filing Date
<u>AC</u> A1	4,168,983	09/25/79	Vittands, et al.	106	14.12	04/13/78
<u>AC</u> A2	5,339,737	08/23/94	Lewis, et al.	101	454	05/13/93
<u>AC</u> A3	5,464,710	11/07/95	Yang	430	1	12/10/93
<u>AC</u> A4	Re. 35,512	05/20/97	Nowak, et al.	101	454	09/19/95

Foreign Patent Documents

Examiner Initial*	Document Number	Publ. Date	Country or Patent Office	Sub Class	Class	Trans- lation
<u>AC</u> A5	WO 98/12583	03/26/98	PCT			N/A

Other Documents

(including author (if listed), title, relevant pages, date of publication including at least month and year).

Examiner Initial*	
<u>AC</u> A6	Frans Defilet, LGZ Landis & Gyr Zug Corporation, "Kinegrams 'Optical Variable Devices' (OVD's) For Banknotes, Security Documents and Plastic Cards," San Diego, April 1-3, 1987
<u>AC</u> A7	S.P. McGrew, "Hologram Counterfeiting: Problems and Solutions," SPIE, Volume 1210 Optical Security and Anticounterfeiting Systems, 1990, pages 66-76
<u>AC</u> A8	Rudolf L. van Renesse, "Security Design of Valuable Documents and Products," SPIE, Vol. 2659, June 1996, pages 10-20
<u>AC</u> A9	Steve McGrew, "Countermeasures Against Hologram Counterfeiting," Internet site <a href="http://www.iea.com/nli/publications/countermeasures.htm">www.iea.com/nli/publications/countermeasures.htm</a> , January 6, 2000
<u>AC</u> A10	Roger W. Phillips, "Optically Variable Films, Pigments, and Inks," SPIE Vol. 1323, Optical Thin Films III: New Developments, 1990, pages 98-109
<u>AC</u> A11	Roger W. Phillips and Anton F. Bleikolm, "Optical Coatings for Document Security," Applied Optics, Vol. 35, No. 28, October 1, 1996, pages 5529-5534

Examiner: David Smith

Date Considered: 12/7/01

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicants: Richard L. Bonkowski, et al.  
 Serial No.: 09/351,102  
 Filing Date: July 8, 1999  
 For: DIFFRACTIVE SURFACES WITH COLOR SHIFTING BACKGROUNDS



Att'y Docket No. 13676.142  
 Group: 1772

- ACA12 J.A. Dobrowolski; F.C. Ho; and, A. Waldorf, "Research on Thin Film Anticounterfeiting Coatings at the National Research Council of Canada," *Applied Optics*, Vol. 28, No. 15, July 15, 1989, pages 2702-2717
- ASA13 J. Rolfe, "Optically Variable Devices for Use on Bank Notes," *SPIE, Vol. 1210 Optical Security and Anticounterfeiting Systems*, pages 14-19, 1990
- ASA14 OVD Kinegram Cor, "OVD Kinegram Management of Light to Provide Security," Internet site [www.kiknegram.com/xhome/home.html](http://www.kiknegram.com/xhome/home.html), December 17, 1999
- ACA15 I.M. Boswarva, et al., "Roll Coater System for the Production of Optically Variable Devices (OVD's) for Security Applications," *Proceedings, 33rd Annual Technical Conference, Society of Vacuum Coaters*, pages 103-109 (1990)

### References Cited by Applicants

While the filing of Information Disclosure Statements is voluntary, the procedure is governed by the guidelines of Section 609 of the Manual of Patent Examining Procedure and 37 C.F.R. §§ 1.97 and 1.98. To be considered a proper Information Disclosure Statement, Form PTO-1449 shall be accompanied by a copy of each listed patent or publication or other item of information and a translation of the pertinent portions of foreign documents (if an existing translation is readily available to the applicant), an explanation of relevance of each reference not in the English language, and should be submitted in a timely manner as set out in MPEP Sec. 609.

Examiners will consider all citations submitted in conformance with 37 C.F.R. § 1.98 and MPEP Sec. 609 and place their initials adjacent the citations in the spaces provided on this form. Examiners will also initial citation not in conformance with the guidelines which may have been considered. A reference may be considered by the Examiner for any reason whether or not the citation is in full conformance with the guidelines. A line will be drawn through a citation if it is not in conformance with the guidelines AND has not been considered. A copy of the submitted form, as reviewed by the Examiner, will be returned to the applicant with the next communication. The original of the form will be entered into the application file.

Each citation initialed by the Examiner will be printed on the issued patent in the same manner as reference cited by the Examiner on Form PTO-892.

The reference designations "A1," "A2," etc. (referring to Applicant's reference 1, Applicant's reference 2, etc.) will be used by the Examiner in the same manner as Examiner's reference designations "A," "B," "C," etc. on Office Action Form PTO-1142.

G:\DATA\WPDOCS\JURS\13676142 149

W. L. Bonkowski  
 Examiner:

08/18/7/01  
 Date Considered:

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicants: Richard L. Bonkowski, et al.

Serial No.: 09/351,102

Att'y Docket No. 13676.142

Filing Date: July 8, 1999

Group: 1772

For: DIFFRACTIVE SURFACES WITH COLOR SHIFTING BACKGROUNDS



SUPPLEMENTAL  
INFORMATION DISCLOSURE CITATIONS MADE BY APPLICANT

U.S. Patent Documents

Examiner Initial*	Patent Number	Issue Date	Name	Class	Sub Class	Filing Date	
AC	A1	4,155,627	05/22/79	Gale, et al	350	162	12/21/77

**References Cited by Applicants**

While the filing of Information Disclosure Statements is voluntary, the procedure is governed by the guidelines of Section 609 of the Manual of Patent Examining Procedure and 37 C.F.R. §§ 1.97 and 1.98. To be considered a proper Information Disclosure Statement, Form PTO-1449 shall be accompanied by a copy of each listed patent or publication or other item of information and a translation of the pertinent portions of foreign documents (if an existing translation is readily available to the applicant), an explanation of relevance of each reference not in the English language, and should be submitted in a timely manner as set out in MPEP Sec. 609.

Examiners will consider all citations submitted in conformance with 37 C.F.R. § 1.98 and MPEP Sec. 609 and place their initials adjacent the citations in the spaces provided on this form. Examiners will also initial citations not in conformance with the guidelines which may have been considered. A reference may be considered by the Examiner for any reason whether or not the citation is in full conformance with the guidelines. A line will be drawn through a citation if it is not in conformance with the guidelines AND has not been considered. A copy of the submitted form, as reviewed by the Examiner, will be returned to the applicant with the next communication. The original of the form will be entered into the application file.

Each citation initialed by the Examiner will be printed on the issued patent in the same manner as references cited by the Examiner on Form PTO-892.

The reference designations "A1," "A2," etc. (referring to Applicant's reference 1, Applicant's reference 2, etc.) will be used by the Examiner in the same manner as Examiner's reference designations "A," "B," "C," etc. on Office Action Form PTO-1142.

G:\DATA\WPDOCS\JBS\13676142.S14

Examiner:

Date Considered:

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.